

Sharp HealthCare gets ahead of the curve: Performance management with IBM Cognos software

Overview

■ Challenge

Manual, error-prone processes and disparate, unreliable data drove Sharp to adopt a performance management system that could leverage their large data stores.

■ Why IBM?

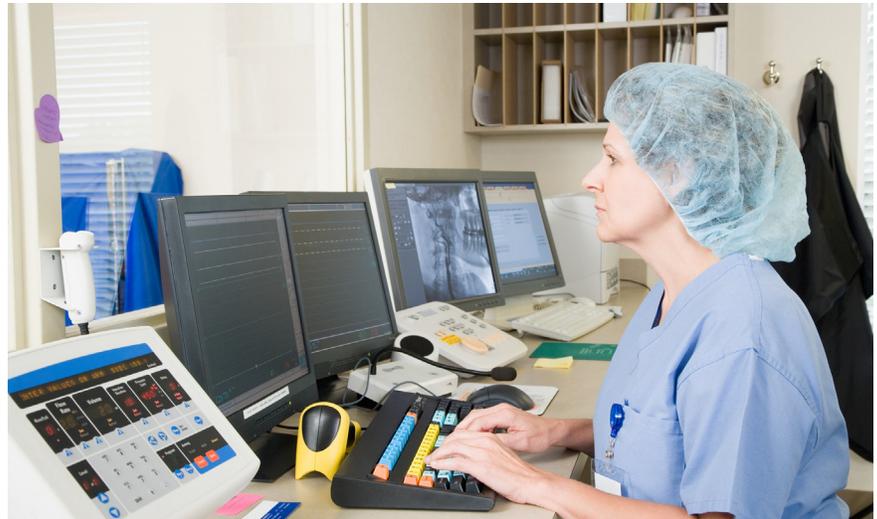
Sharp chose IBM Cognos software for its business intelligence (BI) and analytics engine to leverage its data and enable faster decision-making while empowering departmental users through self-service capabilities.

■ Solution

IBM Cognos software is deployed as Sharp's standardized, single point of entry into their central data stores. BI is delivered to users through an easy to use, web-based, zero footprint solution that provides information faster, and in a more efficient and organized manner.

■ Key Benefits

Departmental users have direct access to the data they need to manage operations, understand trends and stay on top of workloads, and quality initiatives are supported with consistent and accurate data that helps Sharp measure results and improve operations.



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Executive summary

Sharp HealthCare is a not-for-profit integrated regional health care delivery system based in San Diego, California that is comprised of four acute care hospitals, three specialty hospitals, two medical groups, a health plan and a full spectrum of other facilities and services. Sharp's 2,600 physicians and over 14,000 employees have an unwavering commitment to excellence and a passion for caring.

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*Vonda Brown, Manager,
Decision Support Systems
Sharp HealthCare*

Together, the Sharp team is working to make Sharp San Diego's best place to work, best place to practice medicine and the best place to receive care. Sharp has a major focus on quality and an additional focus on performance management that has allowed the organization to make major advances in productivity and efficiency. This case study focuses on how Sharp uses IBM® Cognos® BI software to:

- *Stay ahead of the curve in performance management*
- *Leverage business intelligence (BI) to promote user adoption*
- *Improve the workflow for claims management*
- *Support enterprise-wide quality initiatives*

Ahead of the curve in performance management

Like many large healthcare institutions, Sharp through the years became dependent on hundreds of Microsoft® Excel® spreadsheets and Microsoft Access™ databases to meet the financial reporting requirements of its operations department. Realizing they would not be able to efficiently manage their business given the disparate data sources and manual processes, Sharp deployed a data warehouse to support

operational performance management more than ten years ago, a project led by Vonda Brown, Manager, Decision Support Systems.

The data warehouse unites charge, expense, revenue and clinical information—from clinic, medical group, hospital, lab, pharmacy, physician orders, vital signs, allergies, immunizations, operating room, encounters and referral data—into one place to make operational decisions easier and more effective. Sharp chose IBM Cognos software as its BI and analytics engine to leverage this data and make decisions easier and more effective—while empowering the organization's departmental users.

With IBM Cognos software, the operational departments, medical groups, hospitals and site directors can compare total charges against a diagnosis code, monitor financial trending and discover areas of exposure. Users can analyze data over time to identify trends. For example, users can view and analyze denial rates as well as hospital admission and discharge volumes, and they can analyze physician utilization efficiency rates.

"Departmental users can generate reports to improve operational efficiency as well as departmental productivity," said Brown. "I hear consistent feedback from users that they are able to access information to improve productivity. Users are now better able to get a handle on activity levels and more accurately allocate resources to optimize performance. This solution delivers valuable information faster, and in a more efficient and organized manner."

She continued, "Departments now gain a better handle on managing operations, understanding trends and staying on top of the workloads they face over time. I think we are ahead of the curve in implementing performance management because not many other healthcare organizations have had a data warehouse as long as we've had. My team is understanding all the data and providing feedback to internal users so they can develop reports that drive effective changes and improvements in operations."

Leveraging BI to promote user adoption

Like many large healthcare institutions, Sharp realized that using spreadsheets and databases to record and roll up revenue was unsustainable. Manual,

error-prone processes and disparate, unreliable data drove the company to change users over to a performance management system that could leverage their large data store. Now IBM Cognos software supports operational processes throughout the entire organization.

Sharp has a great number of source systems and a myriad collection of reporting tools. "Like many healthcare organizations, you can name a product and we probably have it," said Brown. Sharp evaluated various BI products but chose IBM Cognos BI software primarily for its ease of use. Sharp has been a long-time user of IBM Cognos reporting tools, having originally purchased them over ten years ago and utilizing them in the past primarily for efficient IT reporting and report distribution. Empowering Sharp's departmental users to create and modify their own reports was now a major goal.

According to Brown, "We had multiple tools accessing information without a real handle on how people were accessing the system, what they were using and the data they were getting back. We wanted to wrap our arms

around delivering a single point of entry into our central data warehouse." Some users were accessing the data warehouse through databases, while others were relying on spreadsheets. Some wrote SQL queries through Microsoft Query Analyzer, and some users accessed the data warehouse through IBM Cognos BI software. Brown said, "We were having to centrally support four different tools for accessing information as well as a proprietary preformatted tool. My staff was just spread too thin to support five different reporting tools, so we needed a better solution."

"We chose IBM Cognos BI software because it was the product that our key users could learn intuitively, without using a manual," said Brown. "We were early adopters of the current version for all the original reasons we chose IBM Cognos software years ago. It is easy to use, web-based and requires zero footprint, which is very important to us because we are locked down to a specific desktop configuration."

It took the organization almost two years to make the transition from multiple toolsets to an enterprise standard

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for reporting. Users were allowed to convert at their own pace, and many were reluctant to abandon their spreadsheets. “Change is always hard,” she continued. “And by going from five tools to a single tool we were changing the way that many users did their jobs. We were afraid that users would not respond well to change, that they would resist being told that the organization was standardizing on a single tool for accessing information. But users liked the tool right away, particularly its flexibility and ease of use.”

Brown said, “We thought we’d receive pushback from users who thought they wouldn’t have the time to learn it and who did not want to change the way they were accessing information. But after being live for only a short time we received positive feedback, and users quickly appreciated the power of this solution and their ability to get the information they needed to improve operations.” In addition, IBM Cognos BI software delivers graphical Excel integration capabilities, which according to Brown, “have been very helpful for convincing die-hard spreadsheet users to switch over!”

An objective Sharp achieved in deploying its BI platform was to enable and empower departmental users to leverage IBM Cognos BI reporting capabilities to create, modify and manage reports themselves. “For the most part, my IT team does not build reports,” she said. “We have done a few that go across multiple medical groups or multiple entities, but for the most part, we build the infrastructure—the data models—and allow our users to just go ahead and access the BI and performance information they need.”

Improving the workflow for claims management

As an integrated delivery system, Sharp HealthCare also manages a health plan, provides a management services organization (MSO) and supports the claims processes from its three medical groups, supporting over 1,500 physicians. Sharp uses IBM Cognos software to manage its claims inventory departmental workflow. Knowing the number of claims pending at any time and understanding reimbursement and aging of claims in accounts receivable is critical to cash flow and to ensuring compliance with regulations.

Sharp utilizes IBM Cognos software to ensure claims are paid in a timely manner and that operations remain

compliant with regulations. Previously using manual processes, Sharp was having difficulty determining how many claims were pending, where backlogs were occurring and their total value.

“When a doctor checked on a claim to find out why he hasn’t been paid, we had trouble knowing if the claim had been pended,” said Carol Wanke, Director, Patient Financial Services. “Some claims would be missed because the reps only looked after their own assignments. To be simplistic, a healthcare organization’s total claims constitute its true inventory. A manager needs to have this complete information at hand.”

To meet this challenge, Sharp utilized IBM Cognos BI reporting capabilities to dramatically improve the productivity of billers and claim processors by automating its claims management inventory. With the flexibility of the IBM Cognos toolset, they created a claims inventory report that allows Sharp to monitor and manage the over a dozen health plans that they process. Different rules applied to each plan make the claims process extraordinarily complex, and by using IBM Cognos software, Sharp now can

identify and challenge vendors that are not sending in their claims in a timely fashion.

Furthermore, the health plans occasionally audit Sharp's claims inventory, making claims management not only a financial issue but also a compliance issue. IBM Cognos software is helping Sharp manage and improve the productivity of this workflow, gain visibility into the status of claims and comply with regular audits.

"We were literally counting piles of file folders," said Wanke, "The IBM Cognos system is saving me weeks-and-weeks of manual processing time. But perhaps more importantly, we can now make our audits from both sides. Now we can tell people exactly when we pended any given claim. As a manager, it gives me a sense of confidence that our department is performing and compliant."

Sharp has added a newly created claims processing dashboard that allows users to quickly review claims, ensure compliance with regulatory requirements and identify trends. "For example, the operational department can determine how many claims are

in the queue, and identify whether high-dollar claims are increasing or decreasing," explained Brown.

Sharp staff has also instituted an organization-wide user group that meets monthly to share best practices. "Moving over to performance management entails a huge learning curve for any organization," said Carol Wanke. "Change management is significant, and the support must be there." By standardizing on IBM Cognos software for performance management and BI, users across the enterprise can share experiences and Sharp can drive the adoption of best practices for performance management across the organization.

Supporting enterprise-wide quality initiatives

To deliver better healthcare in a climate of rising costs, providers worldwide are steadily moving over to pay-for-performance (P4P), a payment model that rewards physicians, hospitals, medical groups and other healthcare providers for meeting performance measures for quality and efficiency. While many organizations are striving to implement this system, many are struggling. Not so at Sharp.

Sharp: A Leader in Smarter Healthcare

A smarter healthcare system starts with better connections, better data and faster and more detailed analysis. Smarter healthcare is interconnected, so doctors, patients and insurers can all share information seamlessly and efficiently. At the center of smarter healthcare is an increasingly more personalized experience, and users throughout Sharp HealthCare can gain access to information that helps the organization improve operations and patient care. Sharp is an industry leader and role model in leveraging performance management to deliver smarter healthcare that results in lower costs, better quality care and healthier people and communities.



At Sharp, quality is top of mind for all employees. Sharp was named a recipient of the 2007 Malcolm Baldrige National Quality Award and was the first health care system to be named a gold-level award recipient by the California Council for Excellence (CCE) for the California Awards for Performance Excellence (CAPE) program, the state-level affiliate of the Baldrige Award. Sharp's Rees-Stealy Medical Group has been recognized by Integrated Healthcare Association (IHA) for best overall performance on important health care quality measures, including preventive care and chronic care management, patient satisfaction and use of information technology to support safer care. Sharp voluntarily participates in California's pay-for-performance program, the largest in the U.S.

"We capture information on about 17 different quality indicators, and are developing a dashboard and custom report that will let physicians see where they stand against each of these indicators on a monthly basis," said Brown. "Our medical groups are recognized in many different California journals as the most improved and in

the top percentile for all their pay-for-performance measures."

Access to IBM Cognos software is provided through Sharp's physician portal, through which all of Sharp's medical groups have access to the P4P system. Site directors can also use the system to drill down by any dimension—such as by specialty (e.g. family practice), by site or by physician when making decisions.

Sharp is making it even easier for physicians to monitor P4P metrics. "We're also working on the integration between our ambulatory EMR applications and IBM Cognos software so physicians can see where they stand against common metrics without learning new applications or altering their workflows," said Brown.

Quality is a major focus for Sharp throughout the enterprise. "Government and regulatory requirements are in place that demand a certain level of quality, but at Sharp we're driven by wanting our patients to know that their care is the first and foremost thing on our minds," she added. "Generating reports from data

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stored in diverse applications helps us support quality initiatives across the organization by providing operational users with consistent and accurate data that can help us measure results and improve operations.”

Summary

Through its performance improvement initiatives, Sharp has made many advances and has plans for further areas of opportunity using IBM Cognos software. A key goal is to get core measurement reports out of the chart and into electronic form—something very few large healthcare organizations have achieved. Once this is rolled out and financial and clinical data are united, Sharp will have even greater control over costs and deeper insight into delivery.

Implementing data governance is an ongoing focus for IT. According to Brown, “There were issues with the way our entities and our operational corporate departments utilize their data. In the past, users relied on multiple tools to extract information, put it on their desktops and make whatever modifications were needed. As we went through the process of rolling out IBM Cognos BI software, we showed users that all the data is coming from a central source, so the reports are consistent and users generating reports are all on the same page. We can continuously prove that our data is correct, and I am now 100 percent confident in the data that we have so that users can count on the reliability of their reports.”

Sharp is in the process of deploying its new clinical information system to support electronic medical records. Once fully deployed, Sharp will continue to expand its clinical data warehouse and further integrate the clinical and financial information using IBM Cognos software. With clinical and financial information linked, this integrated healthcare organization will be able to see a clearer view of operations across multiple operating units. Brown concluded, “My team is learning as much as possible about the data to provide feedback to internal users so they can develop reports that drive effective changes and improvements in operations. We’re now deploying IBM Cognos BI more widely, and will focus on more clinical and financial reporting in the future.”

About IBM Cognos BI and Performance Management

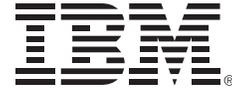
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